

CLAIMS

1. A wireless communication method comprising the steps of:
 - 5 detecting a signal indicating no expected response or intent to continue in a received signal; and
 - redefining frame timing to reduce the inter-frame space when the signal is detected.
- 10 2. The method according to claim 1, wherein said signal is included in a header of a frame.
3. The method according to claim 1, wherein said signal is included in a preamble of a frame.
- 15 4. The method according to claim 1, wherein said signal is included in a footer of a frame.
5. The method according to claim 1, wherein said signal is in the form of an additional subcarrier or combination of subcarriers in a multicarrier symbol of a frame.
- 20 6. A transmitter used in a station in a wireless communication system, wherein said transmitter transmits
- 25 a signal indicating no expected response or intent to continue.

7. A receiver used in a station in a wireless communication system, comprising:

means for detecting a signal indicating no expected response or intent to continue in a received signal; and

5 means for redefining frame timing to reduce the inter-frame space when the signal is detected.

8. A method for reducing medium access overhead in a wireless network consisting of a plurality of stations,
10 wherein the station dynamically alters the inter-frame space by redefining interpretation of the inter-frame space, said method comprising the steps of:

detecting a signal indicating no expected response or intent to continue in a received signal; and

15 redefining the interpretation of the inter-frame space to contain shorter time slot when the signal is detected.

9. A method for reducing medium access overhead in a
20 wireless network consisting of a plurality of stations, wherein the station dynamically alters the inter-frame space by redefining interpretation of the inter-frame space, said method comprising the steps of:

detecting a signal indicating no expected response
25 or intent to continue in a received signal; and

redefining the interpretation of the inter-frame spaces to contain fewer time slots when the signal is

detected.

10. The method according to claim 8 or 9, wherein the station, on detecting a signal indicating an expected
5 response or intent to continue in a received signal, interprets:

a first idle time slot subsequent to a transmission as being reserved for signaled response/continuation;

a second idle time slot subsequent to the
10 transmission as being reserved to gain prioritized medium access; and

a third idle time slot subsequent to the transmission as being the minimum time that a station waiting to initiate a transmission on a medium must wait before
15 commencing backoff procedure or initiating the transmission.

11. The method according to claim 8 or 9, wherein the station, on detecting a signal indicating no expected
20 response or intent to continue in a received signal, interprets:

a first idle time slot subsequent to a transmission as being reserved to gain prioritized medium access; and

a second idle time slot subsequent to the
25 transmission being the minimum time that a station waiting to initiate a transmission on a medium must wait before commencing backoff procedure or initiating the

transmission.

12. A method for reducing medium access overhead in a wireless network consisting of a plurality of stations, wherein the station dynamically alters inter-frame space by redefining interpretation of the inter-frame space, said method comprising the steps of:

checking a medium activity indicator determining the end of activity on the medium; and
10 redefining the interpretation of the inter-frame space to contain shorter time-slot when the medium activity indicator is checked.

13. A method for reducing medium access overhead in a wireless network consisting of a plurality of stations, wherein the station dynamically alters inter-frame space by redefining interpretation of the inter-frame spaces, said method comprising the steps of:

checking a medium activity indicator determining
20 the end of activity on the medium; and
redefining the interpretation of the inter-frame spaces to contain fewer time-slots when the medium activity indicator is checked.

25 14. A method for reducing medium access overhead in a wireless network consisting of a plurality of stations, wherein the station dynamically alters the inter-frame

space by redefining the interpretation of the inter-frame space, said method comprising the steps of:

resetting a medium activity indicator when no medium activity is indicated at the instant of time that activity is expected as indicated by the medium activity indicator;
5 and

redefining the interpretation of the inter-frame space to contain shorter time-slot when the medium activity indicator is reset.

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15. A method for reducing medium access overhead in a wireless network consisting of a plurality of stations, wherein the station dynamically alters the inter-frame space by redefining the interpretation of the inter-frame spaces, said method comprising the steps of:

resetting a medium activity indicator when no medium activity is indicated at the instant of time that activity is expected as indicated by the medium activity indicator;
and

20 redefining the interpretation of the inter-frame spaces to contain fewer time-slots when the medium activity indicator is reset.